

ABSTRACT OF THE DISCLOSURE

The present invention provides a cellular
5 communication system that includes a central radio
pool/traffic router (CRP/TR) that sends control and traffic
signals over fiber optic transmission links that connect
the CRP/TR with base stations of the cellular communication
system. The high bandwidth capacity of each fiber link
10 allows a large band of radio frequencies representing many
radio channels to pass between the CRP/TR and individual
base stations. Radio resources can be shared by all base
stations in the cellular communication system, dynamically,
when and where needed, to meet access demands throughout
15 the system. The CRP/TR includes low-powered digital and/or
analog radios and also switching and modulation means used
to convey signals between the radios and various base
stations within the system.